SPECIAL REPORT: What PC Managers Say About OS/2 *page 34*

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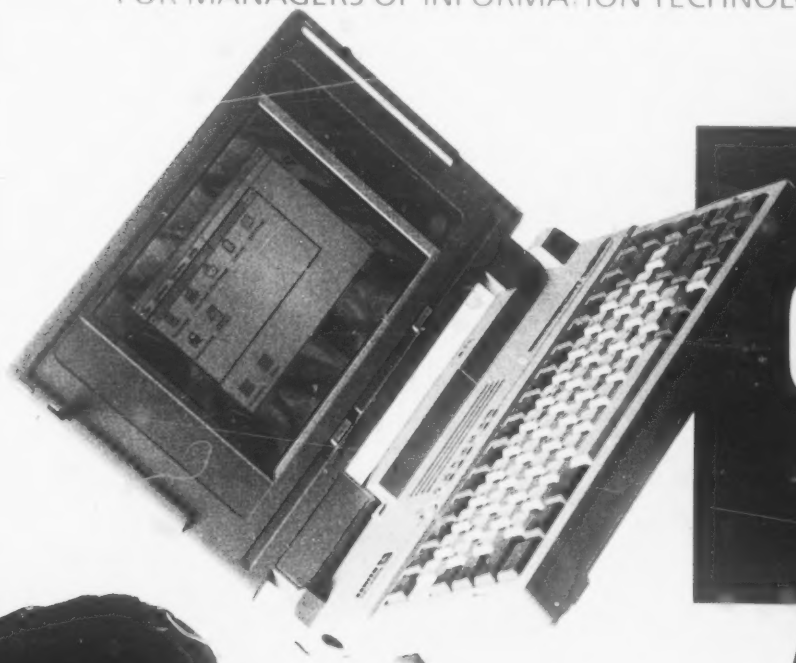
DATAMATION

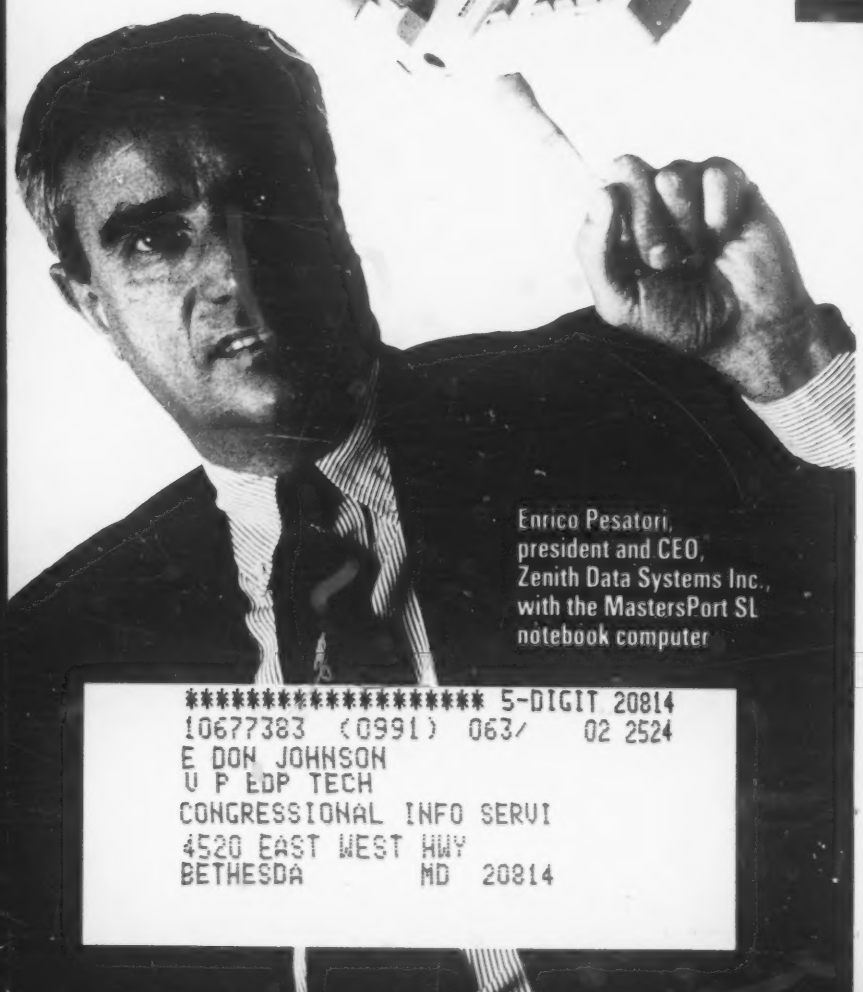
FOR MANAGERS OF INFORMATION TECHNOLOGY WORLDWIDE

SEPTEMBER 15, 1991



Zenith's Comeback Portable

page 28



Enrico Pesatori, president and CEO, Zenith Data Systems Inc., with the MastersPort SL notebook computer

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OCR Comes Down To The Desktop *page 44*

The New Modems: Fast And Cheap *page 51*

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Micro-To-Host **Links** *page 83*

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VOLUME 37
NUMBER 18

Zenith's MastersPort SL steps into the ring with Intel's 386SL microprocessor.

COVER STORY

NOTEBOOK PCs

Zenith's Comeback Portable 28

BY NED SNELL After letting its portable computer business slip into a two-year rest mode, Zenith Data Systems has hit the Resume button, delivering a new 386SL notebook and a message: "We're back."

Cover photography by Andy Goodwin

SPECIAL REPORT

ROUNDTABLE

What PC Managers Say About OS/2 34

EDITED BY PAUL PINELLA

From DOS 5.0 and Windows 3.0 to OS/2 2.0, what will emerge as tomorrow's preferred platform is being debated today in MIS shops around the world.

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Getting Work Groups To Work 81

BY SARAH H. LINDSEY

If you're tired of spending your time tracking down coworkers and sorting through mountains of memos, Coordination Technology wants to help you get organized.

Coordination Technology's Scott Gellis, Yvonne Dahl and Bill McSweeney team up to sweep the clutter off your desk.

FEATURES

PCs & WORKSTATIONS

MAINTENANCE

Diagnostic Software Speeds PC Checkups 40

BY PAUL PINELLA These new diagnostic software tools can quickly determine what ails your sickly PC—sometimes before you even remove the cover.

IMAGING

OCR Comes Down To The Desktop 44

BY BOB FRANCIS Optical character recognition software used to be too pricey for wallet-conscious PC users—not to mention that PC OCR didn't work very well. Now, prices have plummeted and quality has risen.

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MODEMS

The New Modems: Fast And Cheap 51

BY TOM McCUSKER Dial-up modems sporting speeds of 14,400bps are already hitting the market, with prices headed for the $500 neighborhood.

E-MAIL

Seven Steps To Successful E-Mail 56

BY RONALD G. CHILDS Standard transports, gateways and addresses help smooth out the wrinkles in an enterprise mail system. Now all you have to do is get users to take advantage of all that integrated communications capability.

SOFTWARE

APPLICATIONS

On The Fast Track To HR Integration 61

BY LEILA DAVIS It's high time your human resource management systems started talking to your payroll and benefits applications. New integrated, distributed HR applications are making it a whole lot easier to do.

CASE

Unisys CASE Gets Graphic 69

BY MIKE RICCIUTI Designer Workbench, a graphical user interface development tool for Unisys's CASE products, gives mainframe applications graphical pizzazz on PCs.

SYSTEMS

OPTICAL STORAGE

Optical Drives' New Reading Habits 71

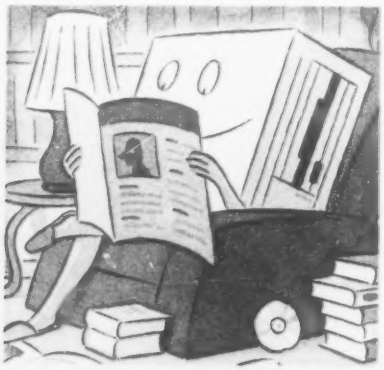
BY DWIGHT B. DAVIS Multifunction optical drives combine rewritable and write-once capabilities, eliminating the need for two drives. But the products have brought a tangle of optical technologies.

CLIENT/SERVER

Where To Turn For Client/Server Skills 79

BY JEFF MOAD Programmers schooled on mainframes may balk when asked to learn to use client/server development tools. And retraining can cost a fortune. Here's a way out of the retraining nightmare.

Newmont Mining's Costine struck gold with an integrated HR application, page 61.



Multifunction drives support a variety of media, page 71.

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LETTERS

A Microsoft Partner Speaks

The July 1, 1991 issue of DATAMATION featured Microsoft SQL Server and its use in client/server architecture ["Microsoft's Client/Server Challenger," p. 28]. Your feature article included a sidebar with a "sampling" of sixteen front-end tools. We contend that our application development tool, Object/1, was noticeably absent from that "sampling" even though we fulfill a significant role as a Microsoft SQL Business Partner.

Currently, there are only seven Microsoft SQL Business Partners in this select program administered by Mr. Dwayne Walker, vice-president of the Microsoft Server Applications Group. As a Microsoft SQL Business Partner, Mdbs is authorized to bundle our front-end development tools (Object/1, KnowledgeMan and GURU) with Microsoft SQL Server and further provides technical expertise in the development of these graphical applications.

Gary W. Rush
President
Mdbs
Lafayette, Ind.

Atanasoff, 4; Eckert-Mauchly, 1

The Letters Department of the May 15, 1991 issue of DATAMATION [p. 10] contains four letters that all argue that you should have honored Atanasoff as the real inventor of the electronic computer.

I hope you have room for one more letter on that subject. I congratulate you on your very appropriate recognition of the UNIVAC I anniversary, and your recognition of J. Presper Eckert and John Mauchly as the inventors of the ENIAC and the UNIVAC. Their collaboration at the Moore School of the University of Pennsylvania in 1942–1946 produced the first general-purpose, programmed electronic computers and initiated the modern age of computers. The company that they formed in 1946 that became the Eckert-Mauchly Computer Corp. was the beginning of the commercial computer industry.

There have been several books and papers published in the past few years that argue that Atanasoff must be recognized as the inventor of the electronic computer because of his failed attempt to build an electronic linear equation solver at Iowa State College in Ames, Iowa, in the years 1939–1942. Lawyers for Honeywell in a dispute over patents discovered that John Mauchly had visited Atanasoff in June of 1941 and had seen his partially completed computer and an unpublished document that described how it worked. Atanasoff left Iowa State in 1942 and was almost unknown in the computer field until he surfaced as a witness for Honeywell many years later.

Readers who are interested in the publications mentioned in the preceding paragraph may enjoy reading a review article entitled "The Origins of Modern Computing," which I published in the September 1990 issue of *Computing Reviews* (Vol. 31 No. 9 p. 449–481). The editors of *Computing Reviews* included responses from several people who disagree (and some who agree) with the opinions expressed in the article.

Saul Rosen
Professor of Computer Science
Purdue University
West Lafayette, Ind.

The Importance Of Being Open

Edward Spire's letter ("A Faster Switch To UNIX," June 1, p.12) was right on the mark. The tools for UNIX exist today! What one encounters more often are users who listen to too many techies who feel the world will end if their favorite proprietary OS or hardware architecture is abandoned. They have not learned to take a wider corporate/institutional view of issues. It's an obvious human trait. They will perhaps be required to learn something quite new. So what! Such is life, change, growth and hopefully progress. This is also one of the best arguments for UNIX and open architectures. Even with the "flavors" of UNIX (and they are decreasing in number every day), moving to another UNIX platform or finding new UNIX-trained employees is becoming increasingly easier than doing the same in a proprietary world.

Those techie gurus (the keepers of the technical holy grail in an organization), who refuse to consider other issues than strictly some esoteric benchmark, then use their influence and mystical jargon to instill a sense of insecurity in the user community. They get increasingly desperate if the old, "It's technically inferior," doesn't work. They then move to, "You'll need to get all new software and relearn everything." When that doesn't hold water (i.e., the user comes to realize that either his/her favorite software has already been ported to a much better interface or that he/she can use DCL commands on a Sun if such is REALLY desired—just like those who will use Windows or OS/2 for the next decade by opening a DOS window and doing all their work there!), the real desperation sets in. We then hear, "We can't support you."

When the support/technical staff hit the organization with that, they should be told to grow up or move on. At that point, these individuals are only covering their own self-interest to the detriment of the whole organization. Their lack of willingness for professional growth shows the same stagnation that is now coming to haunt American industry. Fortunately, managers and users no longer kowtow to these "keepers of the holy byte" and the vendors that supply and encourage them.

John Neubert
Director, Academic Computing
Drew University
Madison, N.J.

CORRECTION

In the June 15, 1991 DATAMATION 100 issue, the table Big Exporters In North America (page 18) inadvertently omitted Unisys Corp. as the fourth largest exporter, with revenues of $2.88 billion in Europe, $1.3 billion in Asia and $558 million in other regions.

ACCESS

There are several ways to use DATAMATION beyond just reading it. You can call on our experts—the editors who specialize in certain fields are eager to hear of your experiences in and thoughts on how to manage information technology resources. You can contribute articles to the magazine by supplying us with manuscripts for our review. You can learn how competitors and colleagues are using software and systems from our research department, which can provide details of both published and unpublished studies on various aspects of technology use. And you can always voice your opinion by submitting a letter to the editor.

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NEW PRODUCTS

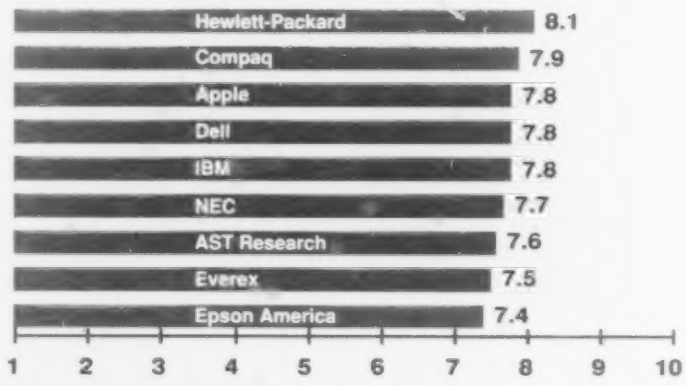
A SELECTION OF RECENT INTRODUCTIONS

DATAMATION PRODUCT REVIEW

Corporate Satisfaction Scorecard: 386-Based PCs

DATAMATION surveyed managers who have purchased 386-based PCs to determine their level of satisfaction.

(1=Not satisfied, 10=Most Satisfied)



Source: DATAMATION, June 1991

▶ SOFTWARE

1-2-3 On The Factory Floor

Do you know what's happening on your factory floor? Lotus Development Corp. has released a 1-2-3 add-on designed to make sure you do. @Factory Bundle provides automatic and real-time communications between Lotus's 1-2-3 spreadsheet and plant floor devices. It funnels data into the spreadsheet for monitoring, analysis and reporting.

@Factory Bundle communicates with programmable logic controllers, process controllers, other computers, operator terminals, robots, bar code readers, instruments and similar shop-floor devices. Lotus says MIS departments can also use @Factory for logging data, activity-based costing, material requirements planning (MRP) reporting and sharing data.

@Factory requires at least an XT-level PC, a hard disk and 512 kilobytes of memory. Prices range from $2,500 to $3,000, depending on the communications drivers included. LOTUS DEVELOPMENT CORP., Cambridge, Mass.

Circle 560

@FACTORY BUNDLE provides the communications link necessary to give managers a look at plant floor activities

The Spreadsheet's Resolve

Claris Corp. says it built Resolve from the ground up to work with Apple Computer Inc.'s System 7.0 operating system. The new Macintosh spreadsheet supports all System 7.0 features, including Publish & Subscribe, Apple Events, balloon help, TrueType and virtual memory. Users can employ Publish & Subscribe to create dynamic links to documents, and they can use Apple Events to link spreadsheets to other applications to create custom apps.

The package provides one-step charting: click on the Make Chart option, and Resolve automatically creates a chart. The package includes 25 different chart types, including polar, wireframe, contour, surface and true 3-D charts. Resolve's scripting language lets users create scripts and attach them to HyperCard-like buttons. Scripts can access Pascal or C external procedures. The $399 package imports and exports Excel 2.2, Informix Wingz 1.0 and 1.1, Lotus 1-2-3 WKS, WK1, SYLK and text file formats. Resolve retails for $399. CLARIS CORP., Santa Clara.

Circle 561

Cooperative Knowledge Processing

Cooperative Processing For KBMS (knowledge-based management systems) lets application developers distribute knowledge-based applications across IBM mainframes, DEC VAXs and PCs. PC or VAX/VMS users can transparently access KBMS applications on IBM mainframes or another VAX using the target application's data, definitions, rules or other application components. For example, a KBMS application on a workstation can perform natural-language processing while the host application updates information in corporate databases.

The PC-to-IBM mainframe version runs under OS/2 or DOS on the PC and uses a coaxial, Synchronous Data Link Control (SDLC) or local area network gateway connection to the mainframe. The OS/2 version supports both the Logical Unit Type 2 (LU2) and LU6.2 communications protocols; the DOS version supports only LU2. PC-to-VAX communications use DECnet task-to-task communications. For VAX-to-IBM connections, the product uses the DECnet/SNA APPC/LU6.2 Programming Interface with VMS/SNA or a DECnet/SNA gateway communications interface.

A software license for IBM mainframes is $35,000. Prices range from $10,000 to $35,000 for VAX systems. AICORP., Waltham, Mass.

Circle 562

MARKET INSIGHTS

A SURVEY OF TECHNOLOGY TRENDS

Networks Head For Outer Space

BY WARREN CHILDS
Business Research Group

Considering their exotic nature and their need for strong technical staff support, satellite communications networks are being implemented at a healthy clip. In the most recent survey of DATAMATION's Technology Panel, 27% of panel members are currently using satellite communications to some extent, and an additional 8% are planning to do so. Sixty-three percent of those who now use satellite communications expect their use will continue to grow.

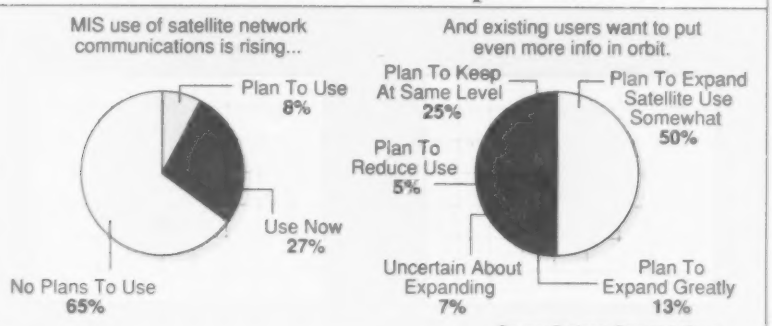
Falling prices and improved technology are making satellite communications an attractive alternative to terrestrial networks. Currently, some 40,000 VSAT terminals are in the field, and the Business Research Group estimates that their use will grow at a rate somewhere between 20 to 45% annually over the next few years.

A satellite network consists of earth stations (such as VSATs) that communicate with each other via a satellite orbiting above the earth. Space-based networks have a number of features that make them attractive for special applications. Because the communications signals are broadcast over the airwaves, the transmission cost is the same regardless of the distance or the number of locations receiving the signal. Any location where a dish antennae can be set up can have access to a satellite network.

Of course, use of satellite communication has a few drawbacks. It is affected by poor weather conditions and, because any station can pick up a signal, managers must consider important security problems. Add to that the fact that, like cable, satellites have a limited life span, so some questions exist as to whether the National Aeronautics and Space Administration (NASA) will continue to support new satellite launches. □

For more information, call Nancy Finn at (617)-964-6204, send her a fax at (617)-558-4402 or write to her at the Business Research Group, 275 Washington Street, Newton, MA 02158.

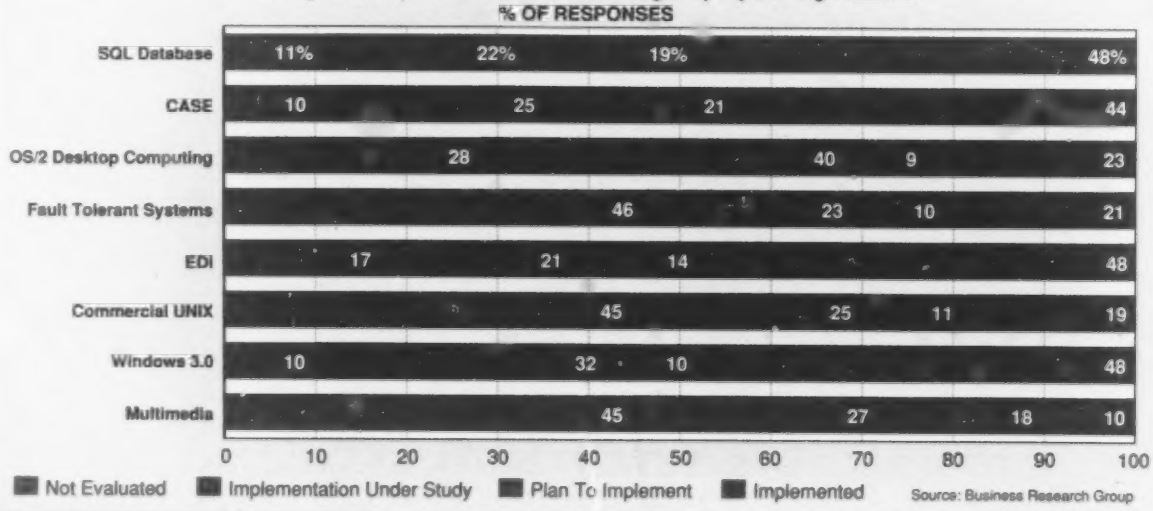
In Orbit With The MIS Space Patrol


MIS use of satellite network communications is rising...
Plan To Use 8%
Use Now 27%
No Plans To Use 65%
And existing users want to put even more info in orbit.
Plan To Keep At Same Level 25%
Plan To Expand Satellite Use Somewhat 50%
Plan To Reduce Use 5%
Uncertain About Expanding 7%
Plan To Expand Greatly 13%

Source: Business Research Group

DATAMATION's Technology Implementation Index: Systems And Software

DATAMATION each month surveys a select group of its readers--the DATAMATION Technology Panel--to investigate the implementation of new technologies by key user organizations.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Source: Business Research Group

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